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ABSTRACT

Results of a study which used a research-based model for clinical supervision of student teachers provide evidence that the model's methodology and use of technology foster reflective teaching and promote implementation of sound decision making strategies by student teachers. Research on the interrelated domains of teacher decision making and clinical supervision informed the model, which was tested with graduate students (N=4) enrolled in a Masters of Education certification program at Marymount University (Virginia). Clinical supervision is a process designed to improve teachers' classroom performance by collecting data from the classroom, analyzing the data, and developing strategies to improve student learning. Self-evaluation by student teachers is an essential element of this supervision model. Successful implementation of this model depends on development of a collegial relationship between the college-based supervisor and the student teacher. Data were collected at three stages during 6-week student teaching sessions: the preactive or planning stage, the interactive or teaching stage, and the postactive or reflective stage. The data indicate that the student teachers became more expert-like in their planning, teaching, and reflecting. The appendices contain the questionnaires used in the preactive and postactive interviews. Educational technology, videotaping and Hypercard, was also used to collect data. (Contains 13 references.) (IAH)

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A RESEARCH-BASED MODEL FOR THE CLINICAL SUPERVISION OF STUDENT TEACHERS

by

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RUNNING HEAD: Decision Making Supervision Model

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A Research-Based Model for the Clinical Supervision of Student Teachers

The primary purpose of this paper is to present the results of a study using a research-based model for clinical supervision of student teachers. These results provide evidence that this model, by its methodology, and through the use of technology, fosters reflective teaching and promotes sound decision making strategies. A second objective is to add to the knowledge base of teacher education and clinical supervision through the observation and analysis of student teachers using these methods.

The development and use of evaluation instruments and methodologies which reflect the growing knowledge base for teacher education has been called for in educational research literature (e.g., McIntyre, 1983). Although much has been learned about expertise in teaching through research conducted during the past ten years or so, current clinical evaluation methods remain rooted in earlier research or no research at all. In a recent field-based study conducted at the Center for Educational Renewal at the University of Washington, John Goodlad (1991) reports that there is a definite separation of theory and practice. "In our study of eight states, we found all were driven more by bureaucratically determined regulations and the ongoing regularities of practice rather than by the knowledge base of teaching in elementary and secondary schools." The problem with earlier research is that these studies focused on teacher effectiveness and were based on the erroneous premise that there is a direct correlation between teachers' external behaviors and student achievement (Welker, 1992). More recent research focuses on teacher thinking and decision making as internal, mental processes which direct as well as reflect the professional development of teachers. By combining what we currently know about the two interrelated domains of teacher decision making and clinical supervision,

our model creates a new area of research and supports the feasibility of putting theory into practice.

Research literature in teacher education provides clear evidence that a teacher's thinking and decision making organize and direct a teacher's behavior and thereby form the context for both teaching and student learning (e.g., Borko, Livingston, McCaleb & Mauro, 1988). Since the late 1970's, educational researchers have viewed the classroom as a complex problem solving environment in which teachers constantly make decisions regarding the many aspects of instruction and classroom management. Educational researchers at that time began to use the new field of cognitive psychology to apply an information processing perspective to understanding how teachers take in, organize, and use information to make decisions about the classroom.

During the 1980's, researchers used advances in cognitive psychology to explore the differences between expert and novice teachers. These comparisons showed important differences between the two groups in terms of their thinking and decision making. For example, expert teachers have information-rich schemas that allow them to perceive and interpret classroom events in meaningful ways (Calderhead, 1983). Gagne (1985) and Gage and Berliner (1984) reported that novices lack the metacognitive and monitoring skills that allow experts to recognize problems in the classroom and make decisions to solve them. Fogarty, Wang, and Creek (1983) found that experienced teachers used a larger range of instructional strategies and linked their actions to student cues in more complex ways than novice teachers. Veenman (1984) examined teaching from a cognitive developmental perspective and concluded that teachers perceive and process information about classroom problems according to their developmental stage. Peterson and Comeaux (1987) reported that expert and novice teachers differ in the cognitive complexity of

schemas for classroom events which allow experts to make sound problem solving decisions. These differences are consistent with expert-novice differences found in domains other than teaching.

Teaching occurs in three main stages described by Jackson (1968) as preactive (planning), interactive (teaching), and postactive (evaluating and reflecting). Recent research has demonstrated that for expert teachers, these stages are highly interactive. For example, Parker and Gehrke (1986) reported that a mental representation formed by a teacher during planning serves as a guide to move the lesson forward while interactive decision making allows the teacher to adapt the plan to students' needs. Berliner (1988) suggested that novice teachers form mental representations during planning that are too narrow and lead, therefore, to problems during teaching. Westerman (1991) examined differences between expert and novice teachers and found important differences in the areas of integration of knowledge, student behavior, and interaction among the three stages of decision making. Westerman proposed decision making models for expert and novice teachers which indicate that experts use information from a wide variety of sources in interpreting classroom situations. These models demonstrate that for experts the three stages of teaching are dynamically interactive while for novices, the interaction is more linear. This means that novices not only have less information about students and classrooms but use that information in ways that are very different from expert teachers. These decision making models were important in the development of the evaluation instrument for this study.

In parallel with research on teacher cognition, a knowledge base on clinical supervision has developed. Clinical supervision is defined as the rationale and practice designed to improve a teacher's classroom performance by collecting data from the

classroom, analyzing the data and developing strategies to improve student learning. The cycle of clinical supervision in this model establishes a set of supervisory practices based on current research in the area of teacher education with an emphasis on decision making strategies.

One of the basic tenets of clinical supervision proposes that the most productive way for teachers to analyze and change the way they teach is to involve them in the analysis of their own teaching. To accomplish this, a collegial relationship must develop between the supervisor and the student teacher which encourages the student teacher to reflect on and evaluate his/her teaching. Self evaluation is an essential element of this supervision model.

Method

Four graduate students, two men and two women, who were student teaching during the Fall semester of 1992 served as subjects in the study. All four were seeking NK-8 certification in the Masters of Education program at Marymount University. The researchers acted as the university supervisors for these student teachers. At Marymount, the twelve weeks of student teaching are divided into two six week sessions, one in the primary grades and the other in upper elementary or middle school. For each subject, during one of these grade level placements, data was collected in three stages: preactive or planning, interactive or teaching, and postactive or reflecting and evaluating. The entire process was completed during the second and the sixth weeks of one grade level placement.

For the preactive stage, student teachers entered their responses to questions on a hypercard stack. These questions were developed from the research literature to determine what decision making had gone into planning the lesson. (See appendix A.) For

the interactive stage, a videotape was made of the student teacher conducting his or her lesson. The postactive stage consisted of the following: 1.) a review of the responses to the preactive interview questions along with the written lesson plan. 2.) a joint viewing of the videotape by the supervisor and student teacher as each completes separate evaluation forms, 3.) a discussion generated by a comparison of the supervisor's evaluation of the lesson and the student teacher's self-evaluation, 4.) a postactive interview designed to help the student teacher reflect on the lesson and evaluate the supervision process.(See appendix B.)

Westerman/Smith Model

Stages	Steps	Data Sources
Preactive	Preactive Interview	Lesson Plan Student teacher's responses to questions
Interactive	Videotaping of lesson	Videotape
		Informal comments, diary, journal, etc.
Postactive	Joint viewing of videotape	Field notes and classroom handouts
	Supervisor and Student Teacher complete separate observation forms Comparative Analysis of evaluation	Completed Observation Forms • Student teacher's self-evaluation • University supervisor's evaluation
	Postactive Interview	Student teacher's responses to questions

The Student Teacher Observation Form used for evaluation in this study was developed from recent research in both the areas of teacher education and clinical supervision. Since this instrument is grounded in educational research, it evaluates student teachers according to standards set by the current knowledge base for teacher education. For this study, the instrument was used by the university supervisor to evaluate the student teacher and by the student teacher to conduct a self-evaluation. In addition to its use in this study, the Student Teacher Observation Form is used for the evaluation of all student teachers in the Marymount Program. Early feedback from both supervisors and student teachers indicates that using this evaluation instrument promotes the kind of reflection and decision making characteristic of expert teachers.

Comparing these data sources in both the second and sixth weeks of student teaching provided the researchers with a rich, in-depth view of the effect of the supervision model on the professional development of the student teachers. The protocols from each student teacher were analyzed for patterns of similarities and differences among the three stages of decision making and between the second and sixth week of one grade level placement. The first round of analysis of the hypercard data was followed by returning to the videotapes for further comparison and verification of results. This recursive use of the data provided substantiation of preliminary hypotheses. Results were then compared and contrasted across protocols assuring that these results were refined by information emerging from the data. Protocols were reviewed by the researchers both independently and collectively in light of the current research knowledge base in teacher education. Protocols from former student teachers were also considered in the data analysis.

Results

This analysis of the data revealed several interesting findings regarding the professional development of student teachers using this supervision model:

1. Responses to preactive and postactive interview questions indicated that student teachers had internalized these questions and their implications. Since these questions were developed from current research findings, this implies that student teachers were reflecting on the knowledge base while making decisions during the planning and implementation of their lessons. During his second grade level placement, when he was no longer required to answer the preactive questions, one student teacher stated that he still went through those questions in his mind while planning his lessons. In other words, he had internalized them.

2. Integrating information from a variety of sources is characteristic of expert teacher decision making. Responses to preactive questions prompting the student teachers to integrate such information provided evidence that between the second and sixth week, student teachers' decision making became more expert in this area. The following example illustrates how one student teacher integrated theories of child development he had learned during coursework with his personal experiences with students in the classroom. When asked about how he would accommodate for the unique characteristics of the class during planning, this student teacher answered, "I have noted that this age group and specifically a number of the children in this class respond better to manipulatives that pencil and paper activities. I have incorporated a mix of visual, aural, and tactile manipulatives for part of the lesson."

3. Student teachers demonstrated a shift from focusing on content in the first lesson, to a greater emphasis on process as well as content, in the second lesson. An

example occurred when a student teacher was asked where the lesson fit into the learning sequence. The first response, at two weeks, cited the county Program of Studies, whereas the second response, at six weeks, included the following statement, "...to develop and use activities involving critical thinking skills and problem solving strategies." This indicates that the student teacher was not only interested in covering the content of the lesson, but was also concerned with the process of developing study skills and higher level thinking in students.

4. Answers to preactive questions during the sixth week as opposed to the second week indicated interaction among the three stages of decision making. During planning a student teacher was asked how she would assess understanding during the lesson. Her response was, "I will listen to the children and search for comprehension in their faces. This class is very good at stating when they are not understanding what is being said. I have instructed them in prior lessons that if they do not understand any part of what is being said they are free to ask questions. They have already taken me up on this more than once." This demonstrates that information acquired from reflecting on past lessons informed her planning for the new lesson.

5. One mark of expertise in teaching is the ability to adapt an ongoing lesson to meet student needs (Fogarty, Wang, & Creek, 1983). This was evidenced in one subject's 6th week videotape. When asked about it later, the student teacher reported, "I did deviate (from my lesson plan) at one point by bringing a contingency activity forward. I chose to do this because a couple of children who tend to favor aural participation and learning mode were not overly engaged in the lesson. At this point they became active participants."

6. There is wide acceptance that a mental image formed during planning is

important because it drives a teacher's interactive performance (Berliner, 1988; Calderhead, 1983; Parker & Gehrhe, 1986; Westerman, 1991). That this model promotes the development of a mental image is evidenced by one of the student teachers who, during his 6th week protocol stated, "The preactive questions force me to make sure I have touched on all key elements of the lesson. It causes me to reflect on the upcoming activity - sort of run through the lesson in my mind."

7. Student Teachers became more reflective about their teaching. Videotaping of the lesson provided graphic evidence of decisions/adaptations made during the interactive stage. Student teachers became more aware because they were able to witness their interactions with students from a different perspective. The videotape provided a comprehensive view of student reactions and engagement. One student teacher summed it up when he said, "The videotape portion of the model was...useful...in that the children's faces and responses were...visible in the video. This is most important to me as I evaluate my technique."

Implications

The collegial relationship developed between the student teacher and university supervisor promotes conceptual understanding of teaching. The significance of this relationship cannot be overemphasized because it provides the supportive, nurturing environment in which student teachers feel free to development their own unique constructions of classroom teaching. This relationship is characterized by a statement from one student teacher, "I find that I still value the process of one-on-one with the supervisoring teacher as we view the video. Her comments as we watch the exact sequence served to further cement the pros and cons of my teaching."

There was some evidence to suggest that with certain students, the development of decision making skills and reflective teaching should begin prior to the student teaching experience. In our sample, there was a wide range of abilities to reflect and self evaluate. Some students showed greater reflection from the beginning, while others had more potential for growth in these areas.

A limitation of the model is the lack of opportunity for participation by cooperating teachers. Since some lessons can be videotaped by the student teacher, without a visit by the university supervisor, there may be less communication between the supervisor and the cooperating teacher. However, once we became aware of this, both researchers devised ways to include the cooperating teacher within the framework of the model.

Although the use of technology was intended to enhance the process, the use of technology for data gathering in this study was problematic. For example, some of the schools did not possess the technology needed to access the hypercard stack. In addition, on several occasions, battery packs were not charged and the videotaping caused a delay in implementing the lesson. The model was designed so that its use is not dependent on technology.

Conclusion

From various data sources in this study, it seems clear that the student teachers became more expert-like in their planning, teaching, and reflecting. The following comments were made by student teachers who seem convinced that the model helped them in their professional development:

"It (the model) helps from the standpoint that it gave me an opportunity to look at myself as I was, not how I remember being....to go back and look at how I was performing."

"...it gives me a chance to see what the kids were doing the whole time - different cues the kids were giving, and if I responded in the proper manner."

"The evaluation procedure utilizing the videotape gave me new insight into how it felt to be a student in my classroom. I could witness when the lesson lagged, and have a chance to reflect on how to improve subsequent lessons. I also could observe disturbing mannerisms and unfruitful techniques that I have used unconsciously. The traditional evaluation technique did not make these flaws so evident."

To what extent did the model promote the student teachers' development and in what ways? At this point it seems too early to answer this question fully. Research using this model has just begun. This is an emergent model that capitalizes on classroom events, using them to help the student teacher establish his or her identify as a teacher. This comes about as a result of viewing the videotapes within the context of the nurturing relationship between the student teachers and their university supervisor. The fact that the methods and evaluation instruments in this model reflect the knowledge base in teacher education indicates the wisdom of putting theory into practice. There is much work remaining to be done in this important area.

References

Berliner, D.C. (1988, April). *Memory for teaching events as a function of expertise.* Paper presented to the American Educational Research Association, New Orleans.

Borko,H., Livingston, C., McCaleb, J., & Mauro, L. (1988). Student teachers' planning and post-lesson reflections: Patterns and Implications for teacher preparation. In J. Calderhead (Ed.), *Teachers' professional learning* (pp. 65-83). London: Falmer.

Calderhead, J. (1983, April). *Research into teachers' and student teachers' cognitions: Exploring the nature of classroom practice.* Paper presented at the meeting of the American Educational Research Association, Montreal, Canada.

Cohen, D.K. (1989). Teaching practice: Plus ca change...(Issue Paper 88-3) East Lansing, MI: National Center for Research in Teacher Education.

Fogarty, J.L., Wang, M.C., & Creek, R. (1983). A descriptive study of experienced and novice teachers' interactive instructional thoughts and actions.

Gage, N.L., & Berliner, D.C. (1984). *Educational psychology.* Dallas: Houghton Mifflin.

Gagne, E.D. (1985). *The cognitive psychology of school learning.* Boston: Little Brown.

Goodlad, John I. (1991). Why we need a complete redesign of teacher education. *Educational Leadership, 49*(3), 4-10.

Parker, W. C., & Gehrke, N.J. (1986). Learning activities and teachers' decision-making: Some grounded hypotheses. *American Educational Research Journal, 23,* 227-242.

Peterson, P.L., & Comeaux, M.A. (1987). Teachers' schemata for classroom events: The mental scaffolding of teachers' thinking during classroom instruction. *Teaching and Teacher Education, 3,* 319-331

Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research, 54,* 143-178.

Welker, Robert (1992). The teacher as expert. Albany: State University of New York Press.

Westerman, Delores A. (1991). Expert and Novice Teacher Decision Making. *Journal of Teacher Education, Vol.42, No.4,* 292-305.

Appendix A

PREACTIVE INTERVIEW

CONTENT

* How did you obtain information about this topic?

* What skills/knowledge did you assume students had prior to lesson?

* Where does this lesson fit into the learning sequence or program of study?

* How do you plan to integrate this lesson with other subjects?

METHODOLOGY

Consider the instructional methods you planned. . .

* How will you initiate the lesson?

* How did you adapt this lesson to accommodate the unique characteristics of the class?

* How do you plan to assess understanding during the lesson?

* Are your goals for the lesson flexible enough to adapt if necessary?

* Have you varied the instructional media?

THE TEACHER

Visualize the interaction between you and the students. . .

* What creative ways have you thought of to motivate students and hold their interest?

* How do you see the students responding?

* Do you foresee any problems? If so, elaborate.

* What contingency plans have you developed?

THE LEARNER

Picture this lesson from the students' perspective. . .

* Am I motivated to learn more about this topic?

* How do I communicate to the teacher that I need help?

* How can I connect this new information with what I already know?

* What will I remember about this lesson?

Appendix B

POSTACTIVE INTERVIEW QUESTIONS

1. Would you rate this lesson as successful or unsuccessful. Why?
2. How did the students respond to the lesson?
3. How closely did you follow your lesson plan?
4. Describe how you might do one part of the lesson differently.
5. Evaluate the lesson in light of your stated goals.
6. Please evaluate the methods used in this supervision model.